

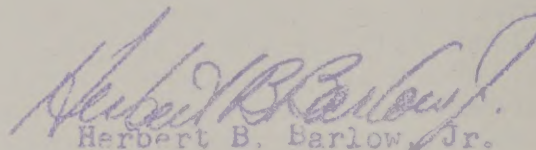
Engineering Department
Washington, D. C.

From : Engineering Director File: T9.0
To : Station Managers
Attention: Chief Engineers
Subject : Engineering Data Urgently Needed by IBS for Re-
presenting Campus Stations before the F. C. C.

Enclosed with this memorandum, you will find a copy of the text of the IBS proposal of new rules to govern all the stations. Your particular attention should be directed to sections 3.803 and 3.851-3.857 which set forth the technical

over

operation of the station. The most controversial issue has been the limit of radiation which has been specified. As you know we have been trying for some time to obtain field strength data from our stations in order to arrive at a limit of radiation which would be most acceptable to the majority and still be low enough to stand a chance of acceptance by the FCC. From the data that has so far been received, which represents a minority of the stations in IBS, it has been observed that with an entirely underground system (i.e. a.c. lines and r.f. lines underground throughout the campus) satisfactory operation can be achieved even under the old 15uv/meter at lambda over 20 rule. However, a substantial percentage of the stations must in at least one place utilize overhead r. f and/or overhead a.c. conductors in the system. It is in such instances that the radiation limit must be raised. With utilization of good engineering practices to reduce standing waves etc., it had been observed that a station can put an excellent signal into the buildings and just come within the proposed 150uv/meter rule. You will note that the wording has been composed so as to define the distance away from the campus property and also from the conductors comprising the r. f. transmission system.


Herbert B. Barlow Jr.

HBB/cbp